REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 6, 10, 14 and 18 have been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-2, 5-7, 9-11, 13-15, and 17-18 are pending and under consideration. Reconsideration is respectfully requested.

ENTRY OF RESPONSE UNDER 37 C.F.R. §1.116:

Applicants request entry of this Rule 116 Response and Request for Reconsideration because:

(a) it is believed that the amendments of claims 1, 6, 10, 14, and 18 put this application into condition for allowance;

(b) the amendments were not earlier presented because the Applicants believed in good faith that the cited prior art did not disclose the present invention as previously claimed; and/or

(c) the amendments place the application at least into a better form for appeal.

The Manual of Patent Examining Procedures sets forth in §714.12 that "[a]ny amendment that would place the case either in condition for allowance or in better form for appeal may be entered." (Underlining added for emphasis) Moreover, §714.13 sets forth that "[t]he Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

REJECTION UNDER 35 U.S.C. §103:

A. In the Office Action, at pages 2-5, claims 1, 2, 5-7, 9-11, 13 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (USPN 6,741,534; hereafter, Takahashi) in view of Okumura (USPN 5,444,687; hereafter, Okumura). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Independent claims 1, 6, 10, and 18 have been amended to show more clearly differences between the present invention and the cited references. The basis for the amendments is, for example, FIG. 6, paragraphs [0022] and [0037].

In the apparatus of the present invention the controller determines whether current time information of the pickup is greater than or equal to 95 minutes. Where current time information is less than or equal to 95 minutes, the controller determines a logical block address of the pickup and where the current time information is greater than 95 minutes, the controller counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of a pickup, a memory stores the reference number of ATIP syncs for each track of the optical disc, a counter counts the number of ATIP syncs for each track at the current position of the pickup, and a location determination unit compares the number of counted ATIP syncs with the reference number of ATIP syncs and where the number of ATIP syncs is less than or equal to the reference number, determines that the pickup is in a lead-in area, and where the number of ATIP syncs is greater than the reference number, determines the logical block address of the pickup to reduce access time. The method, controller, and computer readable medium of the present invention perform in corresponding fashion.

For example, claim 1 of Takahashi recites:

> An information recording medium having a data area which includes a plurality of zones, each one of which includes a plurality of sectors, comprising: a defect management area which contains information for defining a spare area for compensating for a defective area; and a spare area allocated in a predetermined zone of the data area, based on the information for defining the spare area contained in the defect management area, wherein the defect management area includes a first area, a second area and a third area; the first area includes a sector number of a first sector in a spare area of fixed capacity as information for defining the spare area of fixed capacity in a first zone of the plurality of zones contained in the data area; the second area includes an area for storing a sector number of a defective sector contained in the data area; the defective sector is a sector to be an object of a slipping replacement process; the spare area of fixed capacity is an area which is used instead of the defective sector detected in the slipping replacement process; the third area includes an area for storing a sector number of a first sector in a spare area of variable capacity which is allocated in a last zone of the plurality of zones, as necessary, and includes an area for storing a sector number of a first sector in a defective block and a sector number of a first sector in a replacement block in the spare area in connection with each other; the defective block is a block to be an object of a linear replacement process; the spare area of fixed capacity and the spare area of variable capacity are areas which are used instead of the defective block detected in the linear replacement process; and the spare area of fixed capacity before the slipping replacement process is performed is given a sector number without being given a logical sector number. (emphasis added)

Hence, Takahashi does not teach or suggest the combination of determinations of the present claimed invention.

Okumura teaches, col. 6, line 58-col. 8, line 9:

> The operation of the above described CD-ROM drive device will now be described.
>
> FIG. 4 is a flow chart showing the operation of this device.
>
> Upon starting of operation of the device, the linear velocity of the CD-ROM 1 is measured

first (S1). In the CD-ROM 1, data is recorded at a constant linear velocity of 1.2 m/sec. to 1.4 m/sec. but the recording speed differs depending upon the disc, so that it is necessary to know the recording speed of data in the CD-ROM 1 first. For this purpose, for example, the feed motor 4 is driven under the control of the controller 5 to move the read head 3 to a position of Φ50 mm of the CD-ROM 1 to detect a data block of, e.g., 00 minute, 02 second, 00 block. Then, the read head 3 is moved from this position to a position of about Φ76 mm at which a data block of 20 minute, 02 second, 00 block should be recorded at the linear velocity of 1.3 m/sec. and the center frequency of the VCO in the clock reproduction circuit 8 is switched to (x1.6) to read the address information. If the address information is about 19 minute, the linear velocity is judged to be 1.4 m/sec at the linear velocity of recorded data. If the address information is about 20 minute, the linear velocity is judged to be 1.3 m/sec as the linear velocity. If the address information is about 22 minute, the linear velocity is judged to be 1.2 m/sec as the linear velocity. The detected linear velocity is stored in the controller 5. (emphasis added)

Then, after detecting the current position of the read head 3 (S2), accessing from the host system 15 is awaited (S3). When accessing has been made by the host system 16 and a designated address has been given, the controller 5 calculates, responsive to the measured write speed information, an object address position and an amount of displacement from the current head position (S4). When, for example, the write speed is known to be 1.4 m/sec. and the block corresponding to the designated address is a block of 32 minute, 43 second, 37 block, a position of Φ90 mm is calculated as the position to which the read head should be displaced. (emphasis added)

Then, the controller 5 determines the center frequency of the VCO of the clock reproduction circuit 8 on the basis of the position to which the read head should be displaced (S5). If, for example, the position to which the read head 3 should be displaced is Φ90 mm, the linear velocity becomes about double the linear velocity at the innermost circumference of Φ46 mm, so that the VCO 25 having the center frequency of (x2.0) in FIG. 3 is selected by the selector 27. (emphasis added)

Then the controller 5 moves the read head 3 to the position of Φ90 mm (S6). Upon locking of the PLL of the clock reproduction circuit 8 (S7), the EFM demodulation by the EFM demodulation circuit 9 is started by using the reproduced clock CK and the demodulated data is stored in the memory 12. Upon storing of the demodulated data in the memory 12 by a predetermined amount, the CIRC decoding is started (S8). Upon coincidence of the reproduced address with the designated address, the reproduced data is supplied to the host system 16 through the SCSI interface 17. (emphasis added)

As described in the foregoing, according to the CD-ROM drive device of this embodiment, the center frequency of the VCO constituting the clock reproduction circuit 8 is switched according to the position of the read head 3, so that the period of the reproduced clock CK can be changed over a broad range. By changing the period of the reproduced clock CK in this manner, data at any position on the CD-ROM 1 can be accurately read notwithstanding that the number of revolution per unit time of the CD-ROM 1 remains constant. (emphasis added)

In the above described embodiment, the position of the read head 3 is detected by the output of the linear encoder 10. Alternatively, as shown by a dotted line in FIG. 1, for example, the position of the read head 3 may be detected by a track counter 18 which counts the track number on the basis of an output signal from the head amplifier 6. (emphasis added)

In the above described embodiment, the invention is applied to the drive device of a CD-

> ROM which is accessed by random accessing. The invention is applicable also to a method of reproducing an optical disc recorded with music or video data which is basically accessed by sequential accessing. In this case, the capacity of a primary loading memory which stores data after reading should be set at a capacity which will not overflow at the maximum linear velocity, i.e., at the outermost circumference of the disc, and data stored in the memory should be read out at a constant rate. (emphasis added)

It is respectfully submitted that Okumura's method and device teaches away from the present invention.

Neither Takahashi nor Okumura teaches or suggests the combination of determinations recited in amended independent claims 1, 6, 10, or 18 of the present invention to obtain the logical block address. Thus, it is respectfully submitted that neither Takahashi nor Okumura, alone or in combination, teaches or suggests amended independent claims 1, 6, 10, or 18 of the present invention. Hence, it is respectfully submitted that amended independent claims 1, 6, 10, and 18 are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687), alone or in combination.

Since claims 2, 5, 7, 9, 11, and 13 depend from amended independent claims 1, 6, 10, and 14, respectively, claims 2, 5, 7, 9, 11, and 13 are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) in view of Okumura (USPN 5,444,687), alone or in combination, for at least the reasons amended independent claims 1, 6, and 10 are patentable under 35 U.S.C. §103(a) over Takahashi et al.

B. In the Office Action, at page 5, claims 14-15 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (USPN 6,741,534; hereafter, Takahashi) and Okumura (USPN 5,444,687; hereafter, Okumura) in view of Park (USPN 6,466,535; hereafter, Park). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Independent claim 14 has been amended in correspondence with amended independent claim 1 (see above).

Park teaches a computer readable medium encoded with processing instructions for performing a method of recording data on optical disks using a computer, the method comprising: receiving one of the optical disks; and irradiating light beams of different wavelengths together on a recording layer of the received optical disk to non-magnetically record the data on a track of the received optical disk, wherein first and second ones of the light beams have reproducing wavelengths to reproduce data from corresponding first and second ones of the optical disks having different reproducing standards (see, for example, claim 29 of Park). However, Park does not teach or suggest the combination of determinations recited in amended independent claim 14 of the present invention to obtain the logical block address.

It is respectfully submitted that, even if combined, Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535) do not teach or suggest the combination of determinations recited in amended independent claim 14 of the present invention.

Hence, it is submitted that amended independent claim 14 is patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535), alone or in combination. Since claims 15 and 17 depend from amended independent claim 14, claims 15 and 17 of the present invention are patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535), alone or in combination, for at least the reasons amended independent claim 14 is patentable under 35 U.S.C. §103(a) over Takahashi et al. (USPN 6,741,534) and Okumura (USPN 5,444,687) in view of Park (USPN 6,466,535), alone or in combination

EXAMINER'S RESPONSE TO ARGUMENTS:

In view of the above amendments and arguments, the Examiner's concerns are respectfully submitted to be overcome.

The above arguments and amendments are respectfully submitted to overcome the Examiner's concerns.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: August 27, 2007 By: Darleen J. Stockley
Darleen J. Stockley
Registration No. 34,257

1201 New York Avenue, N.W.
Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501